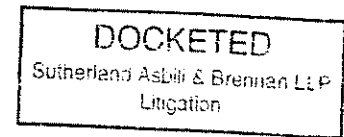


**EXHIBIT 28**

Robert A. Gutkin, Esq. (RG-6054)  
Blair M. Jacobs, Esq. (BJ-4776)  
Christina A. Ondrick, Esq. (CO-8449)  
1275 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2415  
Tel: 202-383-0100  
Fax: 202-637-3593



Attorneys for Plaintiff  
LEIGHTON TECHNOLOGIES LLC

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF NEW YORK

LEIGHTON TECHNOLOGIES LLC,

Plaintiff and Counterclaim Defendant,

v.

OBERTHUR CARD SYSTEMS, S.A.,

Defendant and Counterclaim Plaintiff.

)  
)  
) 04 Civ. 02496 (CM)  
)  
) PLAINTIFF LEIGHTON'S  
) SECOND SET OF  
) INTERROGATORIES (Nos. 1-9)  
)  
)  
)  
)  
)

**PLAINTIFF LEIGHTON'S SECOND SET OF INTERROGATORIES (Nos. 1-9)**

Pursuant to Rule 33 of the Federal Rules of Civil Procedure, Plaintiff Leighton Technologies LLC ("Leighton") hereby requests that Defendant Oberthur Card Systems, S.A. ("Oberthur") answer the following interrogatories separately, fully, and under oath, within 30 days of this request. Plaintiffs are subject to a duty to timely supplement all responses to these interrogatories in accordance with Rule 26(e) of the Federal Rules of Civil Procedure.

**DEFINITIONS**

The definitions and rules of construction set forth in Local Civil Rule 26.3(c) and (d) are incorporated herein by reference. In addition,

1. "Smart Card" means a plastic card that uses radio frequency identification ("RFID") technology and/or includes an electronic element (as defined by the Court in its

Markman ruling and including a computer chip and/or an antenna). "Smart Card" includes different forms, such as contactless, contact, hybrid, and dual function forms. The foregoing definition of "Smart Card" is intended to include plastic cards as Defendant provides them to its customers (*e.g.*, in a finished form with or without printed graphics and text) and in any component or intermediate form (*e.g.*, a core).

2. "Oberthur Card Systems, S.A." shall mean (a) Oberthur Card Systems, S.A., (b) any of its divisions, departments, and other organizational or operating units, (c) all predecessor or successor companies or corporations, (d) all companies, corporations, partnerships, associations, or other business entities which are or have been under common ownership or control or affiliated, in any manner, with Oberthur Card Systems, S.A. or its affiliated companies and (e) each of the present and former officers, directors, employees, agents, attorneys, or other representatives of Oberthur Card Systems, S.A..

3. Any reference to any individual person, either singularly or as a part of a defined group, includes that individual person's employees, agents, successors, assignees, heirs, and representatives.

4. "Leighton's patents" means one or all of U.S. Patent No. 5,817,207, U.S. Patent No. 6,036,099, U.S. Patent No. 6,214,155 B1 and U.S. Patent No. 6,514,367 B1.

5. "Infringe" and "infringement" refer to direct infringement, contributory infringement, inducement to infringe, literal infringement, and/or infringement by the doctrine of equivalents.

6. "Accused products" means, without limitation, any Oberthur Smart Card made, used or offered for sale in the United States.

**INTERROGATORIES**

1. Describe in detail each process that Oberthur has used since October 6, 1998 to manufacture Smart Cards including, but not limited to, each hot lamination process, the temperatures and pressures used therein, and the times that such temperatures and pressures are used.

**RESPONSE:**

2. For each process described in your response to Interrogatory No. 1, describe in detail the process steps used to provide the Smart Cards with (a) ink, graphics and text; (b) overlamine films, overlays, and outer layers; (b) cavities to receive chips in the plastic layers of Cards.

**RESPONSE:**

3. Identify all persons involved in the conception, design, development, or manufacture of Oberthur Smart Cards and each such person's role in such conception, design, development, or manufacture, whether or not such persons are currently or were previously employed by Oberthur, and identify contact information and current place of employment and position for each such person.

**RESPONSE:**

4. Identify by part number and source, or other similar unique designation, all Smart Cards made, used, sold offered for sale, imported, exported, distributed or otherwise disposed of by Oberthur in the United States.

**RESPONSE:**

5. Identify all customers or prospective customers to whom Oberthur has presented, supplied, sampled, demonstrated, offered to sell, or sold any accused product and identify each person with knowledge of such contacts and all documents relating thereto.

**RESPONSE:**

6. To the extent that entities other than Oberthur manufacture, distribute or market the accused products, identify the entities that manufacture, distribute or market the accused products, providing the address, telephone number and person at each entity in charge of such activities, and the dates during which each entity performed such activities and provide a description of the entities' role in the manufacturing or distribution process.

**RESPONSE:**

7. Identify the actual and projected sales volumes of the Oberthur Smart Cards and dollar amount, and by actual and expected gross revenues, net profits, and gross profits derived from these sales, and identify persons knowledgeable regarding such sales and all documents relating thereto.

**RESPONSE:**

8. State the measure of damages that Oberthur contends Leighton would be entitled to receive, if any, in the event that infringement of one or more of Leighton's patents is found and describe in detail all bases and contentions by Oberthur used in determining the measure of damages, including a specific identification of the methodology in computing such measure of damages, and identify all facts and evidence that support (and that Oberthur will rely on at trial to support) Oberthur's identified measure of damages.

**RESPONSE:**

9. For each of Leighton's patents, state separately the date when Oberthur became aware of the patent, identify the person who learned of the patent on Oberthur's behalf and the manner in which the person learned of the patent, and identify any and all documents which reflect or relate to Oberthur's acquisition of knowledge concerning the patent.

**RESPONSE:**

10. If you contend that Oberthur has not infringed any of Leighton's patents, explain the specific basis for each such contention, including which specific claim element(s) and limitation(s) Oberthur alleges are not met literally or equivalently in each of the accused products, and the reasons why Oberthur so alleges, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

**RESPONSE:**

11. If you contend that any of Oberthur's patents fail to comply with the conditions and requirements for patentability specified in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 102, 103 and/or 112, identify all facts supporting and/or relating to this contention, including identification of all documents and individuals supporting such contention, and further applying each limitation of each claim in Oberthur's patents to any alleged invalidating prior art patent, publication, document, machine or method.

**RESPONSE:**

12. Identify all prior art, prior uses or sales, prior knowledge and/or prior inventions that Oberthur contends affects the validity of Leighton's patents, and state with specificity how each such piece of prior art, prior use or sale, prior knowledge and/or prior invention meets the requirements of 35 U.S.C. § 102 and which claims and claim elements each such identified piece

of prior art, prior use or sale, prior knowledge and/or prior invention renders invalid, null and/or void.

**RESPONSE:**

13. If you contend that any of Leighton's patents are unenforceable because of inequitable conduct or other grounds, identify all of the facts, circumstances, documents, and evidence that support that contention including a specific identification of any material information allegedly omitted from disclosure or misrepresented, how such information was material and what facts, circumstances, documents, and evidence supports the assertion that such information was material and was intentionally omitted from disclosure or misrepresented, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

**RESPONSE:**

14. Explain the specific basis for Oberthur's contention that this action is barred by 28 U.S.C. § 1498(a) by identifying all facts supporting and/or relating to this contention, including but not limited to identification of documents and individuals supporting such contention, any sales or offers to sales to government entities that Oberthur contends bars



recovery, and the identity of each person at Oberthur possessing knowledge of facts concerning this contention.

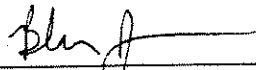
**RESPONSE:**

15. Identify all witnesses that Oberthur will call to testify at trial, including expert witnesses, and summarize the testimony of each witness.

**RESPONSE:**

Dated: April 28, 2005

SUTHERLAND ASBILL & BRENNAN LLP



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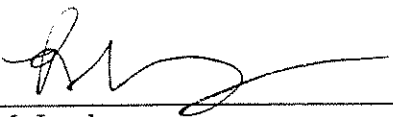
By: Robert A. Gutkin, Esq. (RG-6054)  
Blair M. Jacobs, Esq. (BJ-4776)  
Christina A. Ondrick, Esq. (CO-8449)  
Attorneys for Plaintiff  
LEIGHTON TECHNOLOGIES LLC  
1275 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2415  
Telephone: (202) 383-0100

**CERTIFICATE OF SERVICE**

IT IS HEREBY CERTIFIED that service of the foregoing PLAINTIFF'S SECOND SET OF INTERROGATORIES (Nos. 1-9) has been made on counsel for **OBERTHUR CARD SYSTEMS, S.A.**, by sending a copy of this document by first class mail, facsimile, and email on April 28, 2005 to the following:

James David Jacobs (JJ-7351)  
Frank M. Gasparo (FG-2958)  
805 Third Avenue  
New York, New York 10022

Dated: April 28, 2005

  
\_\_\_\_\_  
Blair M. Jacobs



James David Jacobs (JJ-7351)  
 Frank M. Gasparo (FG-2958)  
 Susan R. Knox (SK-4110)  
 BAKER & MCKENZIE LLP  
 805 Third Avenue  
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 Fax (212) 759-9133

UNITED STATES DISTRICT COURT  
 SOUTHERN DISTRICT OF NEW YORK

LEIGHTON TECHNOLOGIES LLC,	)	
	)	04 Civ. 02496 (CM) (LMS)
Plaintiff and Counterclaim Defendant,	)	
	)	DEFENDANT OBERTHUR
v.	)	CARD SYSTEMS, S.A.'S
	)	RESPONSES TO PLAINTIFF
OBERTHUR CARD SYSTEMS, S.A.,	)	LEIGHTON'S SECOND SET OF
	)	INTERROGATORIES (NOS. 1-9)
Defendant and Counterclaim Plaintiff.	)	
	)	

Pursuant to the Federal Rules of Civil Procedure and the Local Rules of the United States District Courts for the Southern and Eastern Districts of New York, defendant and counterclaim plaintiff Oberthur Card Systems, S.A. ("Oberthur") hereby responds to Plaintiff Leighton's Second Set of Interrogatories (Nos. 1-9) (the "Interrogatories"), dated and transmitted by e-mail by Leighton Technologies LLC ("Leighton") on April 28, 2005, as follows:

**GENERAL OBJECTIONS**

Oberthur states the following objections to Plaintiff's Interrogatories:

1. Oberthur objects to the Interrogatories to the extent that they define "Smart Card" to include "contact" cards even though contact cards are not at issue in this litigation. A contact card is a card that does not contain an electronic element between the plastic core sheets during the lamination process, but contains an electronic element that

is inserted after lamination is completed. Documents concerning only contact cards are not relevant to any claim or defense of either party, and requests for such documents are not reasonably calculated to lead to the discovery of relevant evidence. In a telephone call on May 31, 2005 Leighton's counsel Robert Gutkin clarified to Oberthur's counsel James David Jacobs that these Interrogatories do not seek any discovery on software, fulfillment or personalization.

2. Oberthur objects to the Interrogatories to the extent that they are not limited to include only documents created on or after October 6, 1998, the date that the first of the patents-in-suit issued, except for prior art on which Oberthur intends to rely.

3. Oberthur objects to the Interrogatories to the extent that they include inventions used or manufactured by or for the United States Government. Such inventions are outside the scope of this litigation, and such information is therefore not relevant to any claim or defense of either party.

4. Oberthur objects to the Interrogatories to the extent that they are not limited, except with respect to prior art, to include only information concerning cards destined for the United States market. Except with respect to prior art, only cards destined for the United States market can be relevant to any claim or defense of either party.

5. Oberthur objects to the Interrogatories to the extent that they seek information or documents from Oberthur's subsidiaries and not from Oberthur.

6. Oberthur objects to the Interrogatories to the extent that they contain broader definitions or rules of construction than those set forth in the Federal Rules of Civil Procedure or Local Civil Rule 26.3.

7. Oberthur objects to the Interrogatories to the extent that they seek information protected by the attorney-client privilege, the attorney work-product doctrine, or any other applicable privilege, on the grounds that such information is not subject to discovery. Any inadvertent disclosure of privileged information shall not constitute a waiver of any applicable privilege.

8. Oberthur objects to the Interrogatories to the extent that they seek information already in Leighton's possession, custody or control, or information equally available to Leighton, on the grounds that such Interrogatories are unduly burdensome, oppressive, and harassing.

9. Oberthur objects to the Interrogatories to the extent that they seek information which is not relevant to the subject matter of this action, and which is not reasonably calculated to lead to the discovery of admissible evidence.

10. Oberthur objects to the Interrogatories to the extent that the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive.

11. Oberthur objects to the Interrogatories to the extent that they seek trade secrets, proprietary and confidential information.

12. Oberthur's responses are without prejudice to its right to object to the relevancy, materiality, or admissibility of any information provided.

13. Oberthur's responses are made with the caveat that it has not completed its investigation of the facts underlying this action, or its discovery, or its trial preparation, and, as a result, may discover additional information in the course of that investigation, discovery, and trial preparation. Furthermore, although Oberthur has made a diligent search and reasonable inquiry to locate responsive information, discovery and investigation and trial preparation are continuing, and Oberthur reserves the right to use at trial information which is subsequently located.

**SPECIFIC OBJECTIONS TO PLAINTIFF'S SECOND SET OF  
INTERROGATORIES**

Objections	Interrogatory														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Card Type <sup>1</sup>	•	•	•	•	•	•	•								
Date range <sup>2</sup>			•	•	•	•	•								
Government <sup>3</sup>	•	•	•	•	•	•	•								
U.S. Market <sup>4</sup>	•	•	•		•	•	•								
Subsidiaries <sup>5</sup>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<sup>1</sup>Oberthur objects to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories define "Smart Card" to include "contact" cards even though contact cards are not at issue in this litigation. In a telephone call on May 31, 2005 Leighton's counsel Robert Gutkin clarified to Oberthur's counsel James David Jacobs that these interrogatories do not seek any discovery on software, fulfillment or personalization.

<sup>2</sup>Oberthur objects to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories are not limited to include only documents created on or after October 6, 1998, the date that the first of the patents-in-suit issued, except for prior art on which Oberthur intends to rely.

<sup>3</sup>Oberthur objects to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence.

The Interrogatories include inventions used or manufactured by or for the United States Government. Such inventions are outside the scope of this litigation.

<sup>4</sup>Oberthur objects to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories are not limited, except with respect to prior art, to include only information concerning cards destined for the United States market.

<sup>5</sup>Oberthur objects to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories seek, among other things, information in the possession, custody or control of one of Oberthur's subsidiaries and not of Oberthur. Oberthur will produce discovery not otherwise objectionable from all locations, wherever they are in the world, relating to cards made in or destined for sale or use in the United States.

### **RESPONSES TO INTERROGATORIES**

#### **INTERROGATORY NO. 1:**

Describe in detail each process that Oberthur has used since October 6, 1998 to manufacture Smart Cards including, but not limited to, each hot lamination process, the temperatures and pressures used therein, and the times that such temperatures and pressures are used.

#### **RESPONSE TO INTERROGATORY NO. 1:**

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the



foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 2:

For each process described in your response to Interrogatory No. 1, describe in detail the process steps used to provide the Smart Cards with (a) ink, graphics and text; (b) overlamine films, overlays, and outer layers; (b) cavities to receive chips in the plastic layers of Cards.

RESPONSE TO INTERROGATORY NO. 2:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 3:

Identify all persons involved in the conception, design, development or manufacture of Oberthur Smart Cards and each such person's role in such conception, design, development, or manufacture, whether or not such persons are currently or were previously employed by Oberthur, and identify contact information and current place of employment and position for each such person.

RESPONSE TO INTERROGATORY NO. 3:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than the names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this interrogatory as phrased for the reasons stated in the chart preceding these Responses, and Oberthur also objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome.

Without waiving the foregoing objections, Oberthur will provide business records sufficient to identify persons involved in the conception, design, development or manufacture of cards (a) contactless, hybrid or dual function cards (b) destined for the United States (c) and not used or manufactured by or for the United States Government.

INTERROGATORY NO. 4:

Identify by part number and source, or other similar unique designations, all Smart Cards used, sold or offered for sale, imported, exported, distributed or otherwise disposed of by Oberthur in the United States.

RESPONSE TO INTERROGATORY NO. 4:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 5:

Identify all customers or prospective customers to whom Oberthur has presented, supplied, sampled, demonstrated, offered to sell, or sold any accused product and identify each person with knowledge of such contacts and all documents relating thereto.

RESPONSE TO INTERROGATORY NO. 5:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than the names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objections Oberthur will provide business records sufficient to identify such persons to the extent that the acts in question involve (a) contactless, hybrid or dual function cards (b) that were created on or after October 6,

1998 (c) destined for the United States (d) and not used or manufactured by or for the United States Government.

INTERROGATORY NO. 6:

To the extent that entities other than Oberthur manufacture, distribute or market the accused products, identify the entities that manufacture, distribute or market the accused products, providing the address, telephone number and person at each entity in charge of such activities, and the dates during which each entity performed such activities and provide a description of the entities' role in the manufacturing or distribution process.

RESPONSE TO INTERROGATORY NO. 6:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 7:

Identify the actual and projected sales volumes of the Oberthur Smart Cards and dollar amount, and by actual and expected gross revenues, net profits, and gross profits derived from these sales, and identify persons knowledgeable regarding such sales and all documents relating thereto.

RESPONSE TO INTERROGATORY NO. 7:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than that names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Oberthur also objects to this interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objection, Oberthur will provide business records sufficient to identify persons with knowledge of sales of (a) contactless, hybrid or dual

function cards (b) that were created on or after October 6, 1998 (c) destined for the United States (d) and not used or manufactured by or for the United States Government.

INTERROGATORY NO. 8:

State the measure of damages that Oberthur contends Leighton would be entitled to receive, if any, in the event that infringement of one or more of Leighton's patents is found and describe in detail all bases and contentions by Oberthur used in determining the measure of damages, including a specific identification of the methodology in computing such measure of damages, and identify all facts and evidence that support (and that Oberthur will rely on at trial to support) Oberthur's identified measure of damages.

RESPONSE TO INTERROGATORY NO. 8:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 9:

For each of Leighton's patents, state separately the date when Oberthur became aware of the patent, identify the person who learned of the patent on Oberthur's behalf and the manner in which the person learned of the patent, and identify any and all documents which reflect or relate to Oberthur's acquisition of knowledge concerning the patent.

RESPONSE TO INTERROGATORY NO. 9:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 10:

If you contend that Oberthur has not infringed any of Leighton's patents, explain the specific basis for each such contention, including which specific claim element(s) and limitation(s) Oberthur alleges are not met literally or equivalently in each of the accused products, and the reasons why Oberthur so alleges, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

RESPONSE TO INTERROGATORY NO. 10:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 11:

If you contend that any of Oberthur's patents fail to comply with the conditions and requirements for patentability specified in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 102, 103 and/or 112, identify all facts supporting and/or relating to this contention, including identification of all documents and individuals supporting such contention, and further applying each limitation of each claim in Oberthur's patents to any alleged invalidating prior art patent, publication, document, machine or method.

RESPONSE TO INTERROGATORY NO. 11:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 12:

Identify all prior art, prior uses or sales, prior knowledge and/or prior inventions that Oberthur contends affects the validity of Leighton's patents, and state with specificity how each such piece of prior art, prior use or sale, prior knowledge and/or prior invention meets the requirements of 35 U.S.C. § 102 and which claims and claim elements each such identified piece of prior art, prior use or sale, prior knowledge and/or prior invention renders invalid, null and/or void.

RESPONSE TO INTERROGATORY NO. 12:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 13:

If you contend that any of Leighton's patents are unenforceable because of inequitable conduct or other grounds, identify all of the facts, circumstances, documents, and evidence that support that contention including a specific identification of any material information allegedly omitted from disclosure or misrepresented, how such information was material and what facts, circumstances, documents, and evidence supports the assertion that such information was material and was intentionally omitted from disclosure or misrepresented, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

RESPONSE TO INTERROGATORY NO. 13:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than that names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objections, as presently advised the following individuals have information regarding Leighton's inequitable conduct:

1. Michael H. Minns  
Hahn Loese & Parks LLP  
1225 West Market Street  
Akron, OH 44313  
(330) 864-5550
2. Mark A. Watkins  
Hahn Loese & Parks LLP  
1225 West Market Street  
Akron, OH 44313  
(330) 864-5550

INTERROGATORY NO. 14:

Explain the specific basis for Oberthur's contention that this action is barred by 28 U.S.C. § 1498(a) by identifying all facts supporting and/or relating to this contention, including but not limited to identification of documents and individuals supporting such contention, any sales or offers to sales to government entities that Oberthur contends bars recovery, and the identity of each person at Oberthur possessing knowledge of facts concerning this contention.

RESPONSE TO INTERROGATORY NO. 14:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objection, Oberthur will provide business records sufficient to identify persons at Oberthur possessing such knowledge.

INTERROGATORY NO. 15:

Identify all witnesses that Oberthur will call to testify at trial, including expert witnesses, and summarize the testimony of each witness.

RESPONSE TO INTERROGATORY NO. 15:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than the names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus this interrogatory requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objection Oberthur has not completed its investigation of the facts underlying this action, or its discovery, or its trial preparation, and, as a result, may discover additional information in the course of that investigation, discovery, and trial preparation.

As soon as Oberthur has identified witnesses that it intends to call at trial, it will supplement its response to this Interrogatory.

Dated: New York, New York  
June 6, 2005

BAKER & McKENZIE LLP

By: 

James David Jacobs (JJ-7351)  
Frank M. Gasparo (FG-2958 )  
Susan R. Knox (SK-4110)  
805 Third Avenue  
New York, New York 10022  
Tel. (212) 751-5700  
Fax (212) 759-9133

Attorneys for Oberthur Card  
Systems, S.A.





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 Fax (212) 759-9133

UNITED STATES DISTRICT COURT  
 SOUTHERN DISTRICT OF NEW YORK

LEIGHTON TECHNOLOGIES LLC,	)	04 Civ. 02496 (CM) (LMS)
Plaintiff and Counterclaim Defendant,	)	DEFENDANT OBERTHUR
v.	)	CARD SYSTEMS, S.A.'S
OBERTHUR CARD SYSTEMS, S.A.,	)	SECOND SUPPLEMENTAL
Defendant and Counterclaim Plaintiff.	)	RESPONSES TO PLAINTIFF
	)	LEIGHTON'S SECOND SET OF
	)	INTERROGATORIES (NOS. 1-9)

Pursuant to the Federal Rules of Civil Procedure and the Local Rules of the United States District Courts for the Southern and Eastern Districts of New York, defendant and counterclaim plaintiff Oberthur Card Systems, S.A. ("Oberthur") hereby further supplements Defendant Oberthur Card Systems, S.A.'s Responses to Plaintiff Leighton's Second Set of Interrogatories (Nos. 1-9), served on June 6, 2005, and Defendant Oberthur Card Systems, S.A.'s Supplemental Responses to Plaintiff Leighton's Second Set of Interrogatories (Nos. 1-9), served on July 22, 2005, as follows:

**GENERAL OBJECTIONS**

Oberthur states the following objections to Plaintiff's Interrogatories:

1. Oberthur objected to the Interrogatories to the extent that they define "Smart Card" to include "contact" cards even though contact cards are not at issue in this litigation. A contact card is a card that does not contain an electronic element between the plastic core sheets during

the lamination process, but contains an electronic element that is inserted after lamination is completed. Documents concerning only contact cards are not relevant to any claim or defense of either party, and requests for such documents are not reasonably calculated to lead to the discovery of relevant evidence. In a telephone call on May 31, 2005 Leighton's counsel Robert Gutkin clarified to Oberthur's counsel James David Jacobs that these Interrogatories do not seek any discovery on software, fulfillment or personalization; however, Oberthur will provide summary documents concerning its revenues derived from software, fulfillment or personalization.

2. Oberthur objected to the Interrogatories to the extent that they are not limited to include only documents created on or after October 6, 1998, the date that the first of the patents-in-suit issued, except for prior art on which Oberthur intends to rely. This objection does not apply to interrogatories seeking prior art. In an order entered on June 22, 2005, the court in essence sustained the objection.

3. Oberthur objected to the Interrogatories to the extent that they include inventions used or manufactured by or for the United States Government. Such inventions are outside the scope of this litigation, and such information is therefore not relevant to any claim or defense of either party. Notwithstanding and without waiving this objection, Oberthur will produce documents that relate to cards made, used, sold or offered for sale for the United States Government.

4. Oberthur objected to the Interrogatories to the extent that they are not limited to include only information concerning cards made, used, sold or offered for sale in the United States market. This objection does not apply to interrogatories seeking prior art. The parties agreed to limit the interrogatories in accordance with this objection.

5. Oberthur objected to the Interrogatories to the extent that they seek information or documents from Oberthur's subsidiaries and not from Oberthur. Oberthur will produce discovery not otherwise objectionable from all locations, wherever they are in the world, relating to cards made, used, sold or offered for sale in the United States.

6. Oberthur objects to the Interrogatories to the extent that they contain broader definitions or rules of construction than those set forth in the Federal Rules of Civil Procedure or Local Civil Rule 26.3.

7. Oberthur objects to the Interrogatories to the extent that they seek information protected by the attorney-client privilege, the attorney work-product doctrine, or any other applicable privilege, on the grounds that such information is not subject to discovery. Any inadvertent disclosure of privileged information shall not constitute a waiver of any applicable privilege.

8. Oberthur objects to the Interrogatories to the extent that they seek information already in Leighton's possession, custody or control, or information equally available to Leighton, on the grounds that such Interrogatories are unduly burdensome, oppressive, and harassing.

9. Oberthur objects to the Interrogatories to the extent that they seek information which is not relevant to the subject matter of this action, and which is not reasonably calculated to lead to the discovery of admissible evidence.

10. Oberthur objects to the Interrogatories to the extent that the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive.

11. Oberthur objects to the Interrogatories to the extent that they seek trade secrets, proprietary and confidential information.

12. Oberthur's responses are without prejudice to its right to object to the relevancy, materiality, or admissibility of any information provided.

13. Oberthur's responses are made with the caveat that it has not completed its investigation of the facts underlying this action, or its discovery, or its trial preparation, and, as a result, may discover additional information in the course of that investigation, discovery, and trial preparation. Furthermore, although Oberthur has made a diligent search and reasonable inquiry to locate responsive information, discovery and investigation and trial preparation are

continuing, and Oberthur reserves the right to use at trial information which is subsequently located.

### SPECIFIC OBJECTIONS TO PLAINTIFF'S SECOND SET OF INTERROGATORIES

Objections	Interrogatory														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Card Type <sup>1</sup>	•	•	•	•	•	•	•								
Date range <sup>2</sup>			•	•	•	•	•								
Government <sup>3</sup>	•	•	•	•	•	•	•								
U.S. Market <sup>4</sup>	•	•	•		•	•	•								
Subsidiaries <sup>5</sup>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

<sup>1</sup>Oberthur objected to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories define "Smart Card" to include "contact" cards even though contact cards are not at issue in this litigation. In a telephone call on May 31, 2005 Leighton's counsel Robert Gutkin clarified to Oberthur's counsel James David Jacobs that these interrogatories do not seek any discovery on software, fulfillment or personalization; however, Oberthur will provide summary documents concerning its revenue deriving from software, fulfillment or personalization.

<sup>2</sup>Oberthur objected to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories are not limited to include only documents created on or after October 6, 1998, the date that the first of the patents-in-suit issued. This objection does not apply to interrogatories seeking prior art. In an order entered on June 22, 2005, the court in essence sustained the objection.

<sup>3</sup>Oberthur objected to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories include inventions used or manufactured by or for the United States Government. Such inventions are outside the scope of this litigation. Notwithstanding and without waiving this objection, Oberthur will produce documents that relate to cards made, used, sold or offered for sale for the United States Government.

<sup>4</sup>Oberthur objected to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories are not limited to include only information concerning cards made, used, sold or offered for sale in the United States market. This objection does not apply to interrogatories seeking prior art. The parties agreed to limit the interrogatories in accordance with this objection.

<sup>5</sup>Oberthur objected to these Interrogatories on the grounds that they are overly broad and burdensome and seek information that is not relevant to any claim or defense of either party and not reasonably calculated to lead to the discovery of relevant evidence. The Interrogatories seek, among other things, information in the possession, custody or control of one of Oberthur's subsidiaries and not of Oberthur. Oberthur will produce discovery not otherwise objectionable from all locations, wherever they are in the world, relating to cards made, used, sold or offered for sale in the United States.

### RESPONSES TO INTERROGATORIES

#### INTERROGATORY NO. 1:

Describe in detail each process that Oberthur has used since October 6, 1998 to manufacture Smart Cards including, but not limited to, each hot lamination process, the temperatures and pressures used therein, and the times that such temperatures and pressures are used.

RESPONSE TO INTERROGATORY NO. 1:

Oberthur is producing copies of paper documents that it located after a reasonable search that answer this Interrogatory. The documents bear the following Bates numbers:

OCS\_A\_009677 – OCS\_A\_010262  
OCS\_A\_028883 – OCS\_A\_028895  
OCS\_A\_040661 – OCS\_A\_040853  
OCS\_A\_041125 – OCS\_A\_042588  
OCS\_A\_043491 – OCS\_A\_042651  
OCS\_A\_000003 – OCS\_A\_000008  
OCS\_A\_000009 – OCS\_A\_000014  
OCS\_A\_000015 – OCS\_A\_000018  
OCS\_A\_000019 – OCS\_A\_000022  
OCS\_A\_000023 – OCS\_A\_000027  
OCS\_A\_000028 – OCS\_A\_000031  
OCS\_A\_000032 – OCS\_A\_000035  
OCS\_A\_000038 – OCS\_A\_000041  
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OCS\_A\_000319 – OCS\_A\_000321  
OCS\_A\_000323 – OCS\_A\_000325  
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OCS\_A\_000335 – OCS\_A\_000337

OCS\_A\_000345 – OCS\_A\_000354  
OCS\_A\_000355 – OCS\_A\_000364  
OCS\_A\_000365 – OCS\_A\_000374  
OCS\_A\_000376 – OCS\_A\_000381  
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OCS\_A\_000389 – OCS\_A\_000393  
OCS\_A\_000426 – OCS\_A\_000431  
OCS\_A\_000433 – OCS\_A\_000443  
OCS\_A\_000445 – OCS\_A\_000452  
OCS\_A\_000454 – OCS\_A\_000455  
OCS\_A\_000457 – OCS\_A\_000458  
OCS\_A\_000460 – OCS\_A\_000462  
OCS\_A\_000463 – OCS\_A\_000465  
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OCS\_A\_000470 – OCS\_A\_000472  
OCS\_A\_000474 – OCS\_A\_000476  
OCS\_A\_000478 – OCS\_A\_000480  
OCS\_A\_000481 – OCS\_A\_000483  
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OCS\_A\_000491 – OCS\_A\_000493  
OCS\_A\_000494 – OCS\_A\_000496  
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OCS\_A\_000501 – OCS\_A\_000503  
OCS\_A\_000504 – OCS\_A\_000506  
OCS\_A\_000507 – OCS\_A\_000509  
OCS\_A\_000512 – OCS\_A\_000514



OCS\_A\_000516 – OCS\_A\_000523  
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OCS\_A\_000972 – OCS\_A\_000973  
OCS\_A\_000974 – OCS\_A\_000975  
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OCS\_A\_001027 – OCS\_A\_001030  
OCS\_A\_001043 – OCS\_A\_001045  
OCS\_A\_001046 – OCS\_A\_001048  
OCS\_A\_001050 – OCS\_A\_001052  
OCS\_A\_001053 – OCS\_A\_001055  
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OCS\_A\_001087 – OCS\_A\_001089  
OCS\_A\_001090 – OCS\_A\_001095  
OCS\_A\_001106 – OCS\_A\_001107  
OCS\_A\_001110 – OCS\_A\_001112  
OCS\_A\_001114 – OCS\_A\_001116  
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OCS\_A\_001413 – OCS\_A\_001424  
OCS\_A\_001468 – OCS\_A\_001470  
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OCS\_A\_001866 – OCS\_A\_001867  
OCS\_A\_001868 – OCS\_A\_001869  
OCS\_A\_001952 – OCS\_A\_001953  
OCS\_A\_001954 – OCS\_A\_001962  
OCS\_A\_001963 – OCS\_A\_001971  
OCS\_A\_002231 – OCS\_A\_002246  
OCS\_A\_004939 – OCS\_A\_004991  
OCS\_A\_005088 – OCS\_A\_005090  
OCS\_A\_005092 – OCS\_A\_005106  
OCS\_A\_005217 – OCS\_A\_005224  
OCS\_A\_005602 – OCS\_A\_005623  
OCS\_A\_006084 – OCS\_A\_006088  
OCS\_A\_006090 – OCS\_A\_006095

OCS\_A\_006097 – OCS\_A\_006099  
OCS\_A\_006101 – OCS\_A\_006103  
OCS\_A\_006105 – OCS\_A\_006109  
OCS\_A\_006113 – OCS\_A\_006131  
OCS\_A\_006133 – OCS\_A\_006135  
OCS\_A\_006144 – OCS\_A\_006149  
OCS\_A\_006152 – OCS\_A\_006177  
OCS\_A\_006179 – OCS\_A\_006183  
OCS\_A\_006185 – OCS\_A\_006190  
OCS\_A\_006192 – OCS\_A\_006194  
OCS\_A\_006196 – OCS\_A\_006198  
OCS\_A\_006200 – OCS\_A\_006204  
OCS\_A\_010277 – OCS\_A\_010284  
OCS\_A\_010286 – OCS\_A\_010293  
OCS\_A\_010295 – OCS\_A\_010302  
OCS\_A\_010304 – OCS\_A\_010311  
OCS\_A\_010313 – OCS\_A\_010320  
OCS\_A\_010322 – OCS\_A\_010326  
OCS\_A\_010328 – OCS\_A\_010332  
OCS\_A\_010362 – OCS\_A\_010371  
OCS\_A\_010373 – OCS\_A\_010379  
OCS\_A\_010381 – OCS\_A\_010387  
OCS\_A\_010389 – OCS\_A\_010395  
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OCS\_A\_010452 – OCS\_A\_010454  
OCS\_A\_010482 – OCS\_A\_010490  
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OCS\_A\_010502 – OCS\_A\_010505  
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OCS\_A\_010582 – OCS\_A\_010587  
OCS\_A\_010589 – OCS\_A\_010591  
OCS\_A\_010593 – OCS\_A\_010595  
OCS\_A\_010597 – OCS\_A\_010599  
OCS\_A\_010601 – OCS\_A\_010603  
OCS\_A\_011202 – OCS\_A\_011202  
OCS\_A\_011790 – OCS\_A\_011796  
OCS\_A\_012190 – OCS\_A\_012224  
OCS\_A\_012653 – OCS\_A\_012697  
OCS\_A\_014118 – OCS\_A\_014123  
OCS\_A\_014455 – OCS\_A\_014460  
OCS\_A\_018648 – OCS\_A\_018649  
OCS\_A\_021745 – OCS\_A\_022024  
OCS\_A\_022025 – OCS\_A\_022140  
OCS\_A\_029671 – OCS\_A\_029826  
OCS\_A\_037881 – OCS\_A\_037885  
OCS\_A\_040130 – OCS\_A\_040136  
OCS\_A\_042887 – OCS\_A\_042888

OCS\_A\_042999 – OCS\_A\_042999

OCS\_A\_043000 – OCS\_A\_043000

OCS\_A\_043001 – OCS\_A\_043002

OCS\_A\_043004 – OCS\_A\_043004

OCS\_A\_043005 – OCS\_A\_043005

OCS\_A\_043007 – OCS\_A\_043007

OCS\_A\_043008 – OCS\_A\_043008

OCS\_A\_043009 – OCS\_A\_043009

OCS\_A\_043010 – OCS\_A\_043010

OCS\_A\_043136 – OCS\_A\_043136

OCS\_A\_043897 – OCS\_A\_043897

INTERROGATORY NO. 2:

For each process described in your response to Interrogatory No. 1, describe in detail the process steps used to provide the Smart Cards with (a) ink, graphics and text; (b) overlamine films, overlays, and outer layers; (b) cavities to receive chips in the plastic layers of Cards.

RESPONSE TO INTERROGATORY NO. 2:

Oberthur is producing copies of paper documents that it located after a reasonable search that answer this Interrogatory. The documents bear the following Bates numbers:

OCS\_A\_009677 – OCS\_A\_010262

OCS\_A\_028883 – OCS\_A\_028895

OCS\_A\_040661 – OCS\_A\_040853

OCS\_A\_041125 – OCS\_A\_042588

OCS\_A\_043491 – OCS\_A\_042651

OCS\_A\_000003 – OCS\_A\_000008

OCS\_A\_000009 – OCS\_A\_000014

OCS\_A\_000015 – OCS\_A\_000018  
OCS\_A\_000019 – OCS\_A\_000022  
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OCS\_A\_000319 – OCS\_A\_000321  
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OCS\_A\_000881 – OCS\_A\_000882



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OCS\_A\_001812 – OCS\_A\_001823  
OCS\_A\_001852 – OCS\_A\_001853  
OCS\_A\_001854 – OCS\_A\_001855  
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OCS\_A\_001864 – OCS\_A\_001865

OCS\_A\_001866 – OCS\_A\_001867  
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OCS\_A\_001952 – OCS\_A\_001953  
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OCS\_A\_006185 – OCS\_A\_006190  
OCS\_A\_006192 – OCS\_A\_006194  
OCS\_A\_006196 – OCS\_A\_006198  
OCS\_A\_006200 – OCS\_A\_006204  
OCS\_A\_010277 – OCS\_A\_010284  
OCS\_A\_010286 – OCS\_A\_010293

OCS\_A\_010295 – OCS\_A\_010302  
OCS\_A\_010304 – OCS\_A\_010311  
OCS\_A\_010313 – OCS\_A\_010320  
OCS\_A\_010322 – OCS\_A\_010326  
OCS\_A\_010328 – OCS\_A\_010332  
OCS\_A\_010362 – OCS\_A\_010371  
OCS\_A\_010373 – OCS\_A\_010379  
OCS\_A\_010381 – OCS\_A\_010387  
OCS\_A\_010389 – OCS\_A\_010395  
OCS\_A\_010397 – OCS\_A\_010405  
OCS\_A\_010433 – OCS\_A\_010439  
OCS\_A\_010441 – OCS\_A\_010446  
OCS\_A\_010448 – OCS\_A\_010450  
OCS\_A\_010452 – OCS\_A\_010454  
OCS\_A\_010482 – OCS\_A\_010490  
OCS\_A\_010492 – OCS\_A\_010495  
OCS\_A\_010497 – OCS\_A\_010500  
OCS\_A\_010502 – OCS\_A\_010505  
OCS\_A\_010533 – OCS\_A\_010538  
OCS\_A\_010540 – OCS\_A\_010542  
OCS\_A\_010544 – OCS\_A\_010547  
OCS\_A\_010549 – OCS\_A\_010552  
OCS\_A\_010582 – OCS\_A\_010587  
OCS\_A\_010589 – OCS\_A\_010591  
OCS\_A\_010593 – OCS\_A\_010595  
OCS\_A\_010597 – OCS\_A\_010599  
OCS\_A\_010601 – OCS\_A\_010603

OCS\_A\_011202 – OCS\_A\_011202  
OCS\_A\_011790 – OCS\_A\_011796  
OCS\_A\_012190 – OCS\_A\_012224  
OCS\_A\_012653 – OCS\_A\_012697  
OCS\_A\_014118 – OCS\_A\_014123  
OCS\_A\_014455 – OCS\_A\_014460  
OCS\_A\_018648 – OCS\_A\_018649  
OCS\_A\_021745 – OCS\_A\_022024  
OCS\_A\_022025 – OCS\_A\_022140  
OCS\_A\_029671 – OCS\_A\_029826  
OCS\_A\_037881 – OCS\_A\_037885  
OCS\_A\_040130 – OCS\_A\_040136  
OCS\_A\_042887 – OCS\_A\_042888  
OCS\_A\_042999 – OCS\_A\_042999  
OCS\_A\_043000 – OCS\_A\_043000  
OCS\_A\_043001 – OCS\_A\_043002  
OCS\_A\_043004 – OCS\_A\_043004  
OCS\_A\_043005 – OCS\_A\_043005  
OCS\_A\_043007 – OCS\_A\_043007  
OCS\_A\_043008 – OCS\_A\_043008  
OCS\_A\_043009 – OCS\_A\_043009  
OCS\_A\_043010 – OCS\_A\_043010  
OCS\_A\_043136 – OCS\_A\_043136  
OCS\_A\_043897 – OCS\_A\_043897

INTERROGATORY NO. 3:

Identify all persons involved in the conception, design, development or manufacture of Oberthur Smart Cards and each such person's role in such conception, design, development, or manufacture, whether or not such persons are currently or were previously employed by Oberthur, and identify contact information and current place of employment and position for each such person.

RESPONSE TO INTERROGATORY NO. 3:

The parties agreed that Oberthur would respond to this Interrogatory by identifying three individuals who have knowledge of each of the conception, design, development and manufacture of contactless, hybrid or dual function cards.

The following three individuals have knowledge of the conception, design, development and manufacture of contactless, hybrid or dual function cards:

1. B. Chalus, c/o Oberthur Card Systems, S.A., 35 avenue de l'Ile Saint Martin,  
92726 Nanterre Cedex, France
2. François Launay, Corporate Process Director, Oberthur Card Systems, S.A., Centre  
Industriel de Caen 14, rue Jean-Baptiste Colbert BP 5028, 14076 Caen Cedex 5,  
France
3. Barry Mosteller, Director, Quality & Engineering, Oberthur Card Systems, 523 James  
Hance Court, Exton, PA 19341.

INTERROGATORY NO. 4:

Identify by part number and source, or other similar unique designations, all Smart Cards used, sold or offered for sale, imported, exported, distributed or otherwise disposed of by Oberthur in the United States.

RESPONSE TO INTERROGATORY NO. 4:

Oberthur has used, sold or offered for sale, imported, exported, distributed or otherwise disposed of the following contactless, hybrid or dual-function cards in the United States:

- a. American Pacific contactless

- b. American Express – Express Pay on Blue
- c. American Express “Pebble” (fob)
- d. American Express “Versa”
- e. Chase contactless
- f. Citibank N.A. contactless
- g. Citizens’ Bank contactless
- h. HSBC contactless
- i. United States Department of Commerce contactless
- j. United States Government Accountability Office contactless
- k. United States General Services Administration contactless (2 types, one via BearingPoint Inc. and one via XTec)
- l. United States Postal Service hybrid
- m. Mint contactless
- n. MARAD dual-interface (XTec)
- o. MBNA contactless
- p. MasterCard USA Paypass
- q. Metaca contactless
- r. M&T Bank contactless
- s. Navy Federal Credit Union contactless
- t. OTI contactless
- u. Sun Microsystems contactless
- v. Webster Bank contactless

INTERROGATORY NO. 5:

Identify all customers or prospective customers to whom Oberthur has presented, supplied, sampled, demonstrated, offered to sell, or sold any accused product and identify each person with knowledge of such contacts and all documents relating thereto.

RESPONSE TO INTERROGATORY NO. 5:

Oberthur has presented, supplied, sampled, demonstrated, offered to sell, or sold contactless, hybrid or dual-function cards to the following customers or prospective customers in the United States or to the following customers or prospective customers outside of the United States for cards that may be made in the United States:

- a. ActivCard
- b. Allegheny Plastics
- c. American Pacific Technology
- d. American Express Travel Related Services Company, Inc.
- e. Anteon Corporation
- f. Bank of America
- g. Bank of Montreal
- h. BearingPoint Inc.
- i. Booz Allen Hamilton Inc.
- j. BridgePoint
- k. Canadian Imperial Bank of Commerce (CIBC)
- l. Citibank N.A.
- m. Citizens' Bank
- n. CoreStreet
- o. DataCard
- p. Discover Bank
- q. Electronic Data Systems Corp. (EDS)
- r. Fifth Third Bank
- s. Government of Canada
- t. Government of Mexico
- u. Hibernia National Bank
- v. HID Corporation



w. IC Group  
x. Identity Alliance  
y. Indala Corporation  
z. J.P. Morgan Chase  
aa. Key Bank  
bb. Litronic  
cc. Lockheed Martin  
dd. MARAD (United States Department of Transportation Maritime  
Administration)  
ee. M&T Bank  
ff. MAXIMUS  
gg. MBNA America Bank, N.A.  
hh. MasterCard International Incorporated  
ii. Metaca  
jj. Mint  
kk. Monterrey Subway Project  
ll. National Institute for Science and Technology  
mm. Navy Federal Credit Union  
nn. Norseman Defense Technologies  
oo. Northrop Grumman Corporation  
pp. On Track Innovations Ltd.  
qq. Ontario Provincial Police  
rr. Operational Research Consultants  
ss. People's Bank  
tt. Saflink  
uu. Science Applications International Corporation (SAIC)  
vv. State of Illinois

ww. Sun Microsystems  
xx. SuperCom Ltd.  
yy. Technology Partners  
zz. TFS Technology  
aaa. Unisys  
bbb. United States Bureau of Engraving and Printing  
ccc. United States Department of Commerce  
ddd. United States Department of Defense  
eee. United States Department of Energy  
fff. United States Department of Homeland Security  
ggg. United States Department of Interior  
hhh. United States Department of Labor  
iii. United States Department of State  
jjj. United States Federal Aviation Administration  
kkk. United States Government Accountability Office  
lll. United States General Printing Office  
mmm. United States General Services Administration  
nnn. United States National Security Agency  
ooo. United States Postal Service  
ppp. Viisage  
qqq. Washington Metropolitan Area Transit Authority  
rrr. Washington Mutual Bank  
sss. Webster Bank  
tft. Wells Fargo Bank  
uuu. XTec

Oberthur has also participated in trade fairs and conventions, at which it has had informal, unrecorded communications with prospective customers.

The following individuals at Oberthur have knowledge of Oberthur's contacts with customers or prospective customers:

1. Thierry Burgess, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
2. Brent Bowen, Oberthur Card Systems, 523 James Hance Court, Exton, PA 19341
3. Michael Cariou, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
4. Melissa Carrick, Oberthur Card Systems, 523 James Hance Court, Exton, PA 19341
5. Francine Dubois, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
6. Stephanie Gallahan, Oberthur Card Systems, 4250 Pleasant Valley Road, Chantilly, VA 20151
7. Christophe Goyet, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
8. Patrick Hearn, Oberthur Card Systems, 4250 Pleasant Valley Road, Chantilly, VA 20151
9. Catherine McClaugherty, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
10. Matthew Nally, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
11. Liz Palmer, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
12. Jeffrey Schultz, Oberthur Card Systems, 523 James Hance Court, Exton, PA 19341

Documents concerning Oberthur's contacts with customers or prospective customers are included in the documents that Oberthur is producing.

INTERROGATORY NO. 6:

To the extent that entities other than Oberthur manufacture, distribute or market the accused products, identify the entities that manufacture, distribute or market the accused products, providing the address, telephone number and person at each entity in charge of such activities, and the dates during which each entity performed such activities and provide a description of the entities' role in the manufacturing or distribution process.

RESPONSE TO INTERROGATORY NO. 6:

The parties agreed that Oberthur would respond to this Interrogatory by identifying three individuals who have knowledge of each of manufacture, sales and marketing of contactless, hybrid or dual function cards by entities other than Oberthur.

The following three individuals have knowledge of the manufacture of contactless, hybrid or dual function cards by entities other than Oberthur:

1. Jean-François Arzel, Director, Support and Projects, Oberthur Card Systems, 35 avenue de l'Ile Saint Martin, 92726 Nanterre Cedex, France
2. Jean-Daniel Chatellier, Director of Purchases, Oberthur Card Systems, S.A., 35 avenue de l'Ile Saint Martin, 92726 Nanterre Cedex, France
3. Nigel Sealey, Oberthur Card Systems, S.A., 35 avenue de l'Ile Saint Martin, 92726 Nanterre Cedex, France

The following three individuals have knowledge of the distribution and marketing of contactless, hybrid or dual function cards by entities other than Oberthur:

1. Jean-François Arzel, Director, Support and Projects, Oberthur Card Systems, S.A., 35 avenue de l'Ile Saint Martin, 92726 Nanterre Cedex, France
2. Philippe Tartavull, Oberthur Card Systems, 3150 E. Ana Street, Rancho Dominguez, CA 90221
3. Xavier Drillhon, Managing Director, Oberthur Card Systems, S.A., 35 avenue de l'Ile Saint Martin, 92726 Nanterre Cedex, France

INTERROGATORY NO. 7:

Identify the actual and projected sales volumes of the Oberthur Smart Cards and dollar amount, and by actual and expected gross revenues, net profits, and gross profits derived from these sales, and identify persons knowledgeable regarding such sales and all documents relating thereto.

RESPONSE TO INTERROGATORY NO. 7:

Oberthur is producing copies of paper documents that it located after a reasonable search that answer this Interrogatory as it relates to sales or manufacture of hybrid, contactless or dual-interface cards in the United States. The documents bear the following Bates numbers:

OCS\_A\_007403 – OCS\_A\_007428  
 OCS\_A\_013186 – OCS\_A\_013188  
 OCS\_A\_021607 – OCS\_A\_021608  
 OCS\_A\_021625 – OCS\_A\_021626  
 OCS\_A\_028793 – OCS\_A\_028819  
 OCS\_A\_029577 – OCS\_A\_029578  
 OCS\_A\_030545 – OCS\_A\_030648  
 OCS\_A\_030727 – OCS\_A\_030738  
 OCS\_A\_030829 – OCS\_A\_030829  
 OCS\_A\_031099 – OCS\_A\_031104  
 OCS\_A\_031293 – OCS\_A\_031293  
 OCS\_A\_031294 – OCS\_A\_031294  
 OCS\_A\_031302 – OCS\_A\_031302  
 OCS\_A\_031308 – OCS\_A\_031311  
 OCS\_A\_031314 – OCS\_A\_031318  
 OCS\_A\_031319 – OCS\_A\_031319  
 OCS\_A\_031490 – OCS\_A\_031497

OCS\_A\_031537 – OCS\_A\_031542  
OCS\_A\_031555 – OCS\_A\_031570  
OCS\_A\_032634 – OCS\_A\_032634  
OCS\_A\_032636 – OCS\_A\_032636  
OCS\_A\_032637 – OCS\_A\_032638  
OCS\_A\_032642 – OCS\_A\_032642  
OCS\_A\_032643 – OCS\_A\_032643  
OCS\_A\_032644 – OCS\_A\_032644  
OCS\_A\_032645 – OCS\_A\_032645  
OCS\_A\_032649 – OCS\_A\_032649  
OCS\_A\_032650 – OCS\_A\_032650  
OCS\_A\_032651 – OCS\_A\_032651  
OCS\_A\_032652 – OCS\_A\_032652  
OCS\_A\_032653 – OCS\_A\_032653  
OCS\_A\_032654 – OCS\_A\_032654  
OCS\_A\_032667 – OCS\_A\_032667  
OCS\_A\_032668 – OCS\_A\_032668  
OCS\_A\_032669 – OCS\_A\_032674  
OCS\_A\_032675 – OCS\_A\_032681  
OCS\_A\_033026 – OCS\_A\_033027  
OCS\_A\_034328 – OCS\_A\_034332  
OCS\_A\_034333 – OCS\_A\_034337  
OCS\_A\_034338 – OCS\_A\_034342  
OCS\_A\_034343 – OCS\_A\_034346  
OCS\_A\_034424 – OCS\_A\_034424  
OCS\_A\_034426 – OCS\_A\_034426  
OCS\_A\_034427 – OCS\_A\_034431

OCS\_A\_035675 – OCS\_A\_035678  
OCS\_A\_036513 – OCS\_A\_036557  
OCS\_A\_036558 – OCS\_A\_036590  
OCS\_A\_036608 – OCS\_A\_036608  
OCS\_A\_036616 – OCS\_A\_036616  
OCS\_A\_036623 – OCS\_A\_036623  
OCS\_A\_036624 – OCS\_A\_036624  
OCS\_A\_036625 – OCS\_A\_036625  
OCS\_A\_036628 – OCS\_A\_036628  
OCS\_A\_036650 – OCS\_A\_036723  
OCS\_A\_036726 – OCS\_A\_036773  
OCS\_A\_037092 – OCS\_A\_037134  
OCS\_A\_037135 – OCS\_A\_037227  
OCS\_A\_037228 – OCS\_A\_037229  
OCS\_A\_037245 – OCS\_A\_037299  
OCS\_A\_037300 – OCS\_A\_037300  
OCS\_A\_037303 – OCS\_A\_037304  
OCS\_A\_037309 – OCS\_A\_037324  
OCS\_A\_037331 – OCS\_A\_037331  
OCS\_A\_037332 – OCS\_A\_037366  
OCS\_A\_037367 – OCS\_A\_037400  
OCS\_A\_037401 – OCS\_A\_037422  
OCS\_A\_037423 – OCS\_A\_037458  
OCS\_A\_037459 – OCS\_A\_037481  
OCS\_A\_040915 – OCS\_A\_040915

INTERROGATORY NO. 8:

State the measure of damages that Oberthur contends Leighton would be entitled to receive, if any, in the event that infringement of one or more of Leighton's patents is found and describe in detail all bases and contentions by Oberthur used in determining the measure of damages, including a specific identification of the methodology in computing such measure of damages, and identify all facts and evidence that support (and that Oberthur will rely on at trial to support) Oberthur's identified measure of damages.

RESPONSE TO INTERROGATORY NO. 8:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 9:

For each of Leighton's patents, state separately the date when Oberthur became aware of the patent, identify the person who learned of the patent on Oberthur's behalf and the manner in which the person learned of the patent, and identify any and all documents which reflect or relate to Oberthur's acquisition of knowledge concerning the patent.

RESPONSE TO INTERROGATORY NO. 9:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses. Without waiving the foregoing objection, Oberthur will attempt to ascertain the response to this Interrogatory, and if it does so, will identify the date when Oberthur became aware of each patent and the person who learned of the patent on Oberthur's behalf.

INTERROGATORY NO. 10:



If you contend that Oberthur has not infringed any of Leighton's patents, explain the specific basis for each such contention, including which specific claim element(s) and limitation(s) Oberthur alleges are not met literally or equivalently in each of the accused products, and the reasons why Oberthur so alleges, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

RESPONSE TO INTERROGATORY NO. 10:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 11:

If you contend that any of Oberthur's patents fail to comply with the conditions and requirements for patentability specified in Title 35 of the United States Code, including, but not limited to 35 U.S.C. §§ 102, 103 and/or 112, identify all facts supporting and/or relating to this contention, including identification of all documents and individuals supporting such contention, and further applying each limitation of each claim in Oberthur's patents to any alleged invalidating prior art patent, publication, document, machine or method.

RESPONSE TO INTERROGATORY NO. 11:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 12:

Identify all prior art, prior uses or sales, prior knowledge and/or prior inventions that Oberthur contends affects the validity of Leighton's patents, and state with specificity how each such piece of prior art, prior use or sale, prior knowledge and/or prior invention meets the

requirements of 35 U.S.C. § 102 and which claims and claim elements each such identified piece of prior art, prior use or sale, prior knowledge and/or prior invention renders invalid, null and/or void.

RESPONSE TO INTERROGATORY NO. 12:

Oberthur objects to this Interrogatory on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

INTERROGATORY NO. 13:

If you contend that any of Leighton's patents are unenforceable because of inequitable conduct or other grounds, identify all of the facts, circumstances, documents, and evidence that support that contention including a specific identification of any material information allegedly omitted from disclosure or misrepresented, how such information was material and what facts, circumstances, documents, and evidence supports the assertion that such information was material and was intentionally omitted from disclosure or misrepresented, and identify each person with information relating to such contentions and all facts and documents concerning such contentions.

RESPONSE TO INTERROGATORY NO. 13:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than that names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objections, as presently advised the following individuals have information regarding Leighton's inequitable conduct:

1. Michael H. Minns

Hahn Loese & Parks LLP  
1225 West Market Street  
Akron, OH 44313  
(330) 864-5550

2. Mark A. Watkins  
Hahn Loese & Parks LLP  
1225 West Market Street  
Akron, OH 44313  
(330) 864-5550

INTERROGATORY NO. 14:

Explain the specific basis for Oberthur's contention that this action is barred by 28 U.S.C. § 1498(a) by identifying all facts supporting and/or relating to this contention, including but not limited to identification of documents and individuals supporting such contention, any sales or offers to sales to government entities that Oberthur contends bars recovery, and the identity of each person at Oberthur possessing knowledge of facts concerning this contention.

RESPONSE TO INTERROGATORY NO. 14:

Oberthur is producing copies of paper documents that it located after a reasonable search that answer this Interrogatory. The documents bear the following Bates numbers:

OCS\_A\_006339 – OCS\_A\_006339

OCS\_A\_006340 – OCS\_A\_006340

OCS\_A\_006345 – OCS\_A\_006345

OCS\_A\_006671 – OCS\_A\_006671

OCS\_A\_006672 – OCS\_A\_006672

OCS\_A\_006673 – OCS\_A\_006673

OCS\_A\_006675 – OCS\_A\_006675

OCS\_A\_006676 – OCS\_A\_006676

OCS\_A\_006740 – OCS\_A\_006740

OCS\_A\_006772 – OCS\_A\_006773

OCS\_A\_006775 – OCS\_A\_006775

OCS\_A\_006776 – OCS\_A\_006776  
OCS\_A\_008099 – OCS\_A\_008099  
OCS\_A\_008102 – OCS\_A\_008102  
OCS\_A\_008103 – OCS\_A\_008103  
OCS\_A\_008105 – OCS\_A\_008105  
OCS\_A\_008275 – OCS\_A\_008289  
OCS\_A\_017058 – OCS\_A\_017058  
OCS\_A\_019344 – OCS\_A\_019344  
OCS\_A\_019345 – OCS\_A\_019345  
OCS\_A\_019355 – OCS\_A\_019355  
OCS\_A\_020565 – OCS\_A\_020566  
OCS\_A\_020868 – OCS\_A\_020868  
OCS\_A\_020930 – OCS\_A\_020930  
OCS\_A\_022406 – OCS\_A\_022406  
OCS\_A\_022407 – OCS\_A\_022407  
OCS\_A\_022436 – OCS\_A\_022436  
OCS\_A\_022444 – OCS\_A\_022445  
OCS\_A\_022463 – OCS\_A\_022463  
OCS\_A\_022465 – OCS\_A\_022465  
OCS\_A\_023695 – OCS\_A\_023719  
OCS\_A\_023720 – OCS\_A\_023726  
OCS\_A\_024083 – OCS\_A\_024083  
OCS\_A\_024087 – OCS\_A\_024087  
OCS\_A\_024089 – OCS\_A\_024089  
OCS\_A\_024093 – OCS\_A\_024093  
OCS\_A\_031131 – OCS\_A\_031131  
OCS\_A\_031401 – OCS\_A\_031401

OCS\_A\_038602 – OCS\_A\_038602

OCS\_A\_042247 – OCS\_A\_042247

INTERROGATORY NO. 15:

Identify all witnesses that Oberthur will call to testify at trial, including expert witnesses, and summarize the testimony of each witness.

RESPONSE TO INTERROGATORY NO. 15:

Oberthur objects to this Interrogatory to the extent that it seeks any information other than the names of witnesses, on the grounds that it violates Local Civil Rule 33.3 and thus this interrogatory requires no further response or objection. Without waiving the foregoing objection Oberthur also objects to this Interrogatory as phrased for the reasons stated in the chart preceding these Responses.

Without waiving the foregoing objection Oberthur has not completed its investigation of the facts underlying this action, or its discovery, or its trial preparation, and, as a result, may discover additional information in the course of that investigation, discovery, and trial preparation.

As soon as Oberthur has identified witnesses that it intends to call at trial, it will supplement its response to this Interrogatory.

Dated: New York, New York  
August 22, 2005

BAKER & MCKENZIE LLP

By 

James David Jacobs (JJ-7351)

Frank M. Gasparo (FG-2958)

Susan R. Knox (SK-4110)

805 Third Avenue

New York, New York 10022

Tel. (212) 751-5700

Fax (212) 759-9133

Attorneys for Oberthur Card Systems,  
S.A.

**EXHIBIT 29**

529bleih

1 UNITED STATES DISTRICT COURT  
2 SOUTHERN DISTRICT OF NEW YORK

3 LEIGHTON TECHNOLOGIES, LLC,

4 Plaintiff-Counterclaim Defendant,

5 v.

04 Civ. 2496(CM)

6 MARKMAN HEARING

7 OBERTHUR CARD SYSTEMS, S.A.,

8 Defendant-Counterclaim Plaintiff.

9  
10 -----x  
11 White Plains, N.Y.  
12 February 9, 2005  
10:00 a.m.

13 Before:

14 THE HONORABLE COLLEEN McMAHON,

15 District Judge

16 APPEARANCES

17 SUTHERLAND, ASBILL & BRENNAN, LLP

Attorneys for Plaintiff-Counterclaim Defendant

18 ROBERT A. GUTKIN

19 BLAIR M. JACOBS

20 NEIL G. COHEN

21 CHRISTINE ONDRICK

22 BAKER & MCKENZIE

Attorneys for Defendant-Counterclaim Plaintiff

23 JAMES DAVID JACOBS

24 FRANK M. GASPARO

25 Also present: MIREILLE CLAPIER, Oberthur inhouse counsel

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1 certainly understand that their invention is a process.

2 MR. J. JACOBS: Okay.

3 THE COURT: And I've gotten them to admit that this  
4 morning in no uncertain terms when I said you're claiming the  
5 process for making the card, not the component that goes into  
6 the card.

7 MR. J. JACOBS: Well, your Honor, you're absolutely  
8 right. And maybe I'm trying to kill a horse here, beat a horse  
9 to death, but the point of the matter is what I'm trying to  
10 point out is that there's a high correlation between the  
11 purpose of this invention, particularly this purpose, which was  
12 stressed to the examiner, and the fact of what the electronic  
13 element is. Because if that electronic element is not  
14 sensitive to laminating pressure, you can be -- the pressure  
15 can be infinite, then that isn't the sensitive electronic  
16 element, and that's not what Leighton was trying to stress in  
17 this invention. That doesn't go to his invention.

18 Probably the Court can see where I'm going with this.  
19 But an antenna is not sensitive. It's a piece of wire. An  
20 antenna alone cannot be an electronic element. It makes no  
21 sense with respect to what --

22 THE COURT: Well, you know, I hear what you're saying,  
23 but the claim does not say a highly coordinated heating,  
24 cooling and pressure cycle to encapsulate the sensitive  
25 electronic element.



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1           At the very start this morning, your Honor, I  
2           explained, or I tried to explain, that Leighton's invention  
3           here was built on a lot of prior art, and during the file  
4           wrapper, he set forth that his purpose was to protect -- and  
5           that's the wrong section -- was to protect the chip.

6           THE COURT: It was to manufacture the card without  
7           having the core, but, nonetheless, not damaging the electronic  
8           element.

9           MR. J. JACOBS: Very well said, your Honor. Thank  
10          you.

11          THE COURT: Thank you.

12          MR. J. JACOBS: You can't apply pressure before you  
13          heat the core. Otherwise, you're going to crack the sensitive  
14          electronic element. And I think, as a result of our second  
15          point, we made the point of the sensitivity to the electronic  
16          element. It's the microchip, because the antenna is a mere  
17          wire, plus not being an electronic element, of course.

18          All these, at least from my viewpoint -- and I hope  
19          we've -- if we haven't done it already -- convinced the Court  
20          that all these definitions sort of tie together. These aren't  
21          isolated words that we've selected to bring to the Court's  
22          attention. It really goes back to this amendment which now I  
23          have on the screen, which describes how Leighton got this  
24          patent allowed. And it was this highly coordinated pressure,  
25          heating, cooling cycle.

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1 and the pea. You apply a platen pressure to flat plastic  
2 sheets, and you have a pea in there, which is what your  
3 microchip is. Any pressure probably is going to crush it, is  
4 going to start damaging it. It's a sensitive piece of  
5 microelectronics. It's not an antenna, which is a piece of  
6 wire, which is hard to crush.

7 THE COURT: I wish that were true in my jewelry  
8 cabinet.

9 MR. J. JACOBS: I didn't say bend. I said crush.

10 THE COURT: All right. Fair enough. That's fair  
11 enough.

12 MR. J. JACOBS: So, in fact, what they try to do is  
13 apply minimal or no pressure to the plantens. But they want  
14 the heat to transfer from the plantens, so they close the  
15 plantens on the sandwich. You want to heat the transfer from  
16 the platens where the heat is flowing through to the sandwich,  
17 so you close the plantens, but you try to keep it to little or  
18 no pressure, as the patent teaches.

19 THE COURT: All right.

20 MR. J. JACOBS: And it means little or none. But we  
21 claim, in Claim 16, there's no pressure.

22 THE COURT: Minimal.

23 MR. J. JACOBS: I mean Claim 1.

24 THE COURT: You say there's none. But, certainly, in  
25 Claim 16, it's minimal.

**EXHIBIT 30**

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1 UNITED STATES DISTRICT COURT  
2 SOUTHERN DISTRICT OF NEW YORK

3 LEIGHTON TECHNOLOGIES, LLC,

4 Plaintiff-Counterclaim Defendant,

5 v.

04 Civ. 2496(CM)

6 MARKMAN HEARING

7 OBERTHUR CARD SYSTEMS, S.A.,

8 Defendant-Counterclaim Plaintiff.

9  
10 -----x  
11 White Plains, N.Y.  
12 February 9, 2005  
13 10:00 a.m.

14 Before:

15 THE HONORABLE COLLEEN McMAHON,

16 District Judge

17 APPEARANCES

18 SUTHERLAND, ASBILL & BRENNAN, LLP

Attorneys for Plaintiff-Counterclaim Defendant

19 ROBERT A. GUTKIN

20 BLAIR M. JACOBS

NEIL G. COHEN

21 CHRISTINE ONDRICK

22 BAKER & MCKENZIE

Attorneys for Defendant-Counterclaim Plaintiff

23 JAMES DAVID JACOBS

24 FRANK M. GASPARO

25 Also present: MIREILLE CLAPIER, Oberthur inhouse counsel

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1 all the patents, appears in all the claims. In a  
2 representative claim of the '207 claim up there, electronic  
3 element is claimed as being between said first and second  
4 plastic core sheets.

5 THE COURT: Let me see if I can -- we've read all of  
6 this, so I can actually focus on some questions.

7 Your client claims a process, a process for enclosing  
8 something in which you do not claim any kind of patent rights  
9 at all, via the electronic element, in plastic to get it onto a  
10 card, right? You're claiming the process. You're not claiming  
11 the thing.

12 MR. GUTKIN: I believe that that's a correct  
13 statement.

14 THE COURT: You're not claiming any rights in the  
15 electronic element itself.

16 MR. GUTKIN: No, no.

17 THE COURT: You're just claiming the process for  
18 enclosing the electronic element, or encapsulating, or whatever  
19 the word is that gets used, the electronic element and  
20 embedding it in the card.

21 MR. GUTKIN: That's one of the claims, that's correct.  
22 And in the letter two patents, there's also claims with milling  
23 the card.

24 THE COURT: But it's the process, basically, of  
25 getting the element incorporated into the card.

**EXHIBIT 31**

**United States Patent** [19][11] **4,450,024****Haghiri-Tehrani et al.**[45] **May 22, 1984**[54] **IDENTIFICATION CARD WITH AN IC-MODULE AND METHOD FOR PRODUCING IT**[75] Inventors: **Yahya Haghiri-Tehrani; Joachim Hoppe, both of Munich, Fed. Rep. of Germany**[73] Assignee: **GAO Gesellschaft für Automation und Organisation mbH, Munich, Fed. Rep. of Germany**[21] Appl. No.: **288,496**[22] Filed: **Jul. 30, 1981**[30] **Foreign Application Priority Data**

Aug. 7, 1980 [DE] Fed. Rep. of Germany ..... 3029939

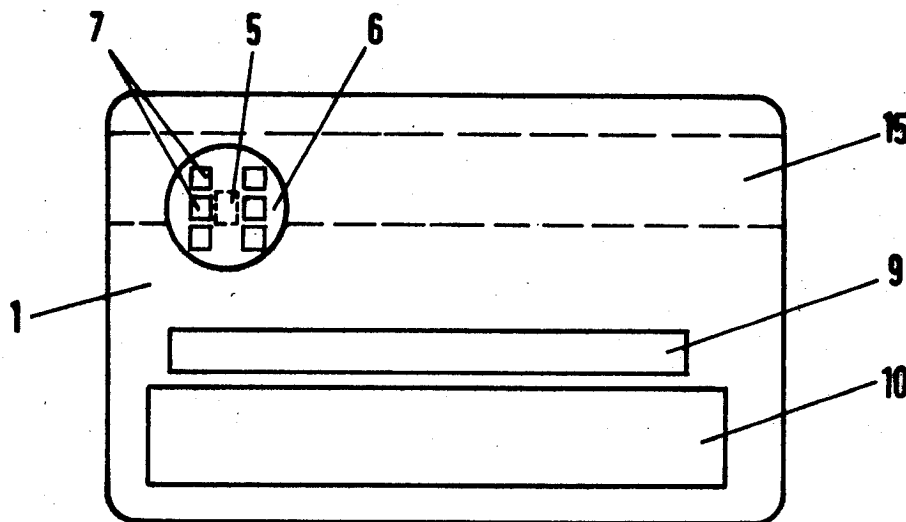
[51] Int. Cl.<sup>3</sup> ..... **B60J 1/00**[52] U.S. Cl. .... **156/108; 156/182; 156/293; 156/295; 156/306.6; 156/309.6; 156/309.9; 156/322; 156/324.4; 264/272.17; 264/279.1; 428/901; 428/916; 283/75**[58] Field of Search ..... **156/182, 322, 295, 331.7, 156/108, 306.6, 293, 309.6, 309.9, 324.4; 264/272.17, 279.1; 428/67, 901, 76, 916, 138; 235/488; 29/831, 841, 577 C; 40/2.2**[56] **References Cited****U.S. PATENT DOCUMENTS**

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3,811,977	5/1974	Kramer .....	156/108
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*Primary Examiner*—John J. Gallagher*Attorney, Agent, or Firm*—Andrus, Scales, Starke & Sawall[57] **ABSTRACT**

An identification card equipped with an integrated circuit, in which the circuit along with its connection leads is arranged on a carrier element which is embeddedly enclosed by the card on all sides by use of the hot lamination technique. In order to protect the sensitive arrangement, the carrier element is subjected to the full laminating pressure only when one or more layers in the card construction have softened.

This is achieved, for example, by providing buffer zones in the card laminate at least in the area of the arrangement in the form of cavities or layers that are easy to deform elastically. The buffer zones protect the arrangement from local pressure peaks in the initial phase of the laminating process. It is also possible to control the laminating pressure as a function of the temperature or the degree of softening of the card layers.

**12 Claims, 9 Drawing Figures**

U.S. Patent May 22, 1984

Sheet 1 of 2

4,450,024

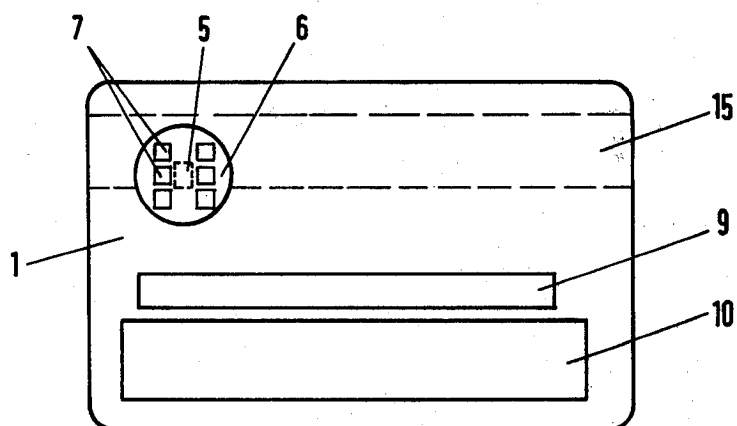


FIG. 1

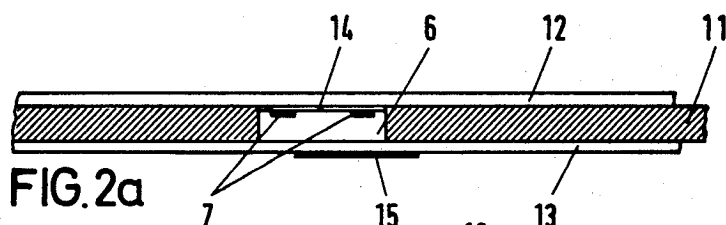


FIG. 2a

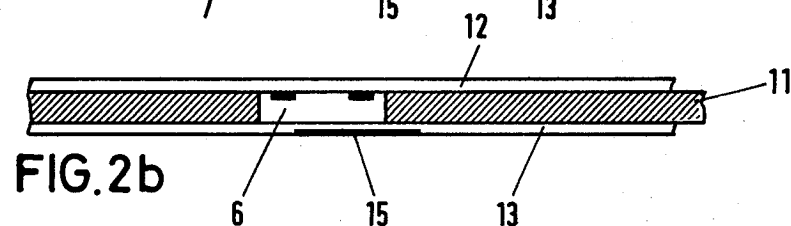


FIG. 2b

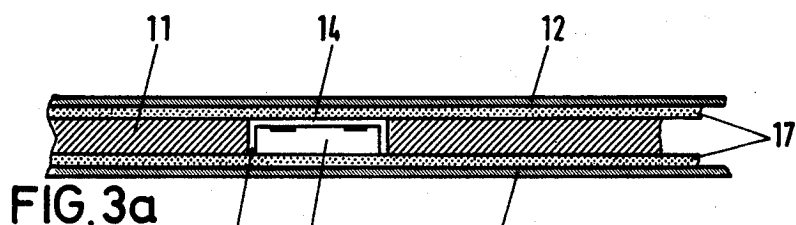


FIG. 3a

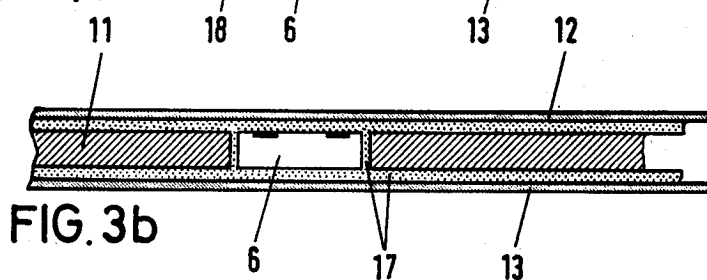


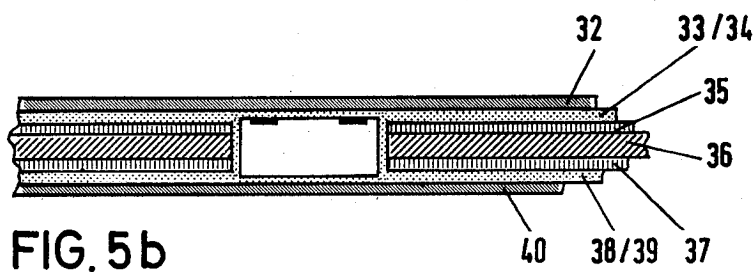
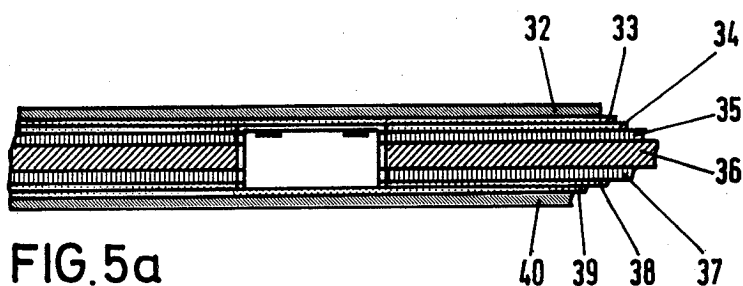
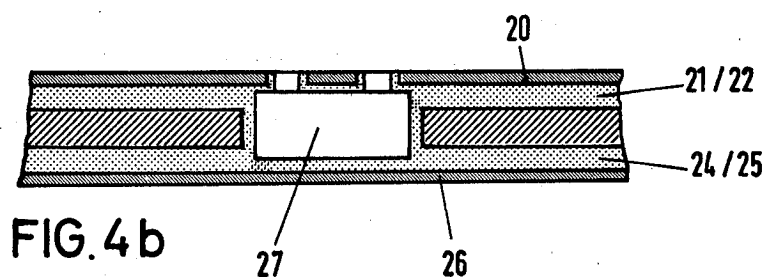
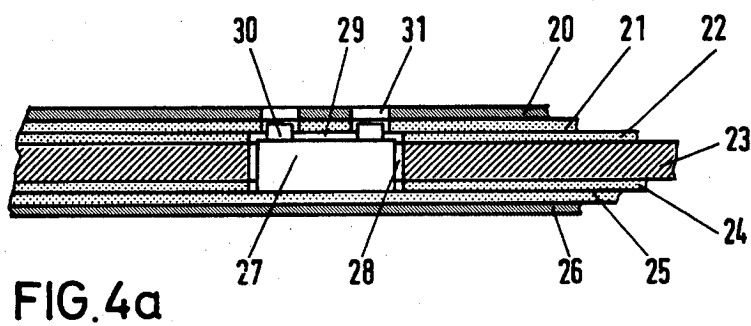
FIG. 3b



U.S. Patent May 22, 1984

Sheet 2 of 2

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4,450,024

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## IDENTIFICATION CARD WITH AN IC-MODULE AND METHOD FOR PRODUCING IT

The invention concerns an identification card or a similar data carrier with an IC module for the processing of electrical signals, whereby the IC module along with its connection leads is arranged on a separate carrier element which is small in comparison to the identification card. The invention further concerns a method of producing this type of identification card.

Identification cards with embedded IC modules have been known for some time. The DE-OS No. 26 59 573, for example, discloses an IC module in which all the connection leads are arranged on a separate carrier plate consisting of rigid material. The carrier plate is glued into an appropriately prepared recess in the card or is connected at the edges with the card by a high-frequency welding process. These methods entail only a slight degree of thermal and mechanical stress for the arrangement, but are elaborate in respect to the card production, since several procedural steps, some of which are technically complicated, must be carried out in the production of the identification card. The incorporation of the carrier element is intended in the case of this known identification card to take place in the so-called embossing area, so that these cards do not meet the usual norms which require the embossing area to be used only for embossings.

The object of the invention thus consists in providing an identification card with an IC module which avoids the above-mentioned disadvantages and can be produced with considerably fewer technical resources.

According to the invention this object is solved through a carrier element laminated into a card composite and connected with the identification card on all sides and over its entire surface. The method of production is characterized in that during the heating phase of the identification card layers the laminating pressure is kept lower than in the final laminating phase, at least in the area of the carrier element.

The invention uses the hot lamination technique, which has been known for some time and is established in practical operation, in order to apply the carrier element provided with the IC module and the connection leads to the card composite in one procedural step during the melting of the various card layers.

The processing of a separate carrier element produced independently of the identification card production in order to produce IC identification cards by using the so-called hot lamination technique proves to be particularly advantageous for this purpose.

The carrier element, which also bears all the connection leads in addition to the integrated circuit, is particularly suited to resist mechanical stress. This is especially true of the stress to which the identification card is exposed in daily use.

The employment of a laminating technique that has been tried out for some time in practical operation allows for the possibility of a rational production of the cards.

Furthermore, hot-laminated identification cards are characterized by an excellent appearance which is due to, among other things, the smooth and highly transparent cover layers of the card. Moreover, hot-laminated identification cards are very well ensured against forgery, as this technique requires a considerable degree of practical experience and the various layers of a hot-

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laminated identification card can be separated from each other only by destroying the card.

Identification cards with integrated circuits, for the production of which cards heat and/or heat and pressure are used, are already known (DE-OS No. 22 20 721, DE-OS No. 26 33 164). However, unlike the invention at hand, the identification cards of the publications are based on an entirely different construction of the IC card. The network bonded with the integrated circuit is arranged over a large surface of a middle card layer. In these arrangements the connection points between the network and the IC arrangement are greatly endangered during production of the card as well as during its handling.

The prior publications, which mention the identification card production only in passing, are not oriented towards practical application in respect to the identification card technology. The production techniques are taken over from the usual identification card production, without taking into consideration the specific problems arising in the incorporation of IC modules and their connection leads into identification cards.

However, the DE-OS No. 26 59 573 is the first to deal with the practical problems arising in the production and handling of IC identification cards. It refers to the fact that production by means of a hot lamination technique is not possible as the IC arrangement is too greatly endangered especially by the thermal stress. In order to avoid the difficulties that arise from this, another much more elaborate and technically impractical manner of card production is therefore adopted. Although the arguments raised in the DE-OS No. 26 59 573 against the hot lamination technique were substantiated by a number of experiments, it turned out that the production of IC identification cards by the so-called hot lamination technique is nonetheless possible if special measures are taken to protect the IC module and its connection leads. It also turned out that not only the thermal stress, but also the great mechanical stress during the laminating process can endanger the IC arrangement to the same degree, especially when local pressure peaks appear in the area of the arrangement. This type of stress can break the silicon wafer and/or destroy the junctions of the crystal and the connection leads, which are endangered by the effect of the heat anyway.

The basic idea of the invention consists essentially in applying the full laminating pressure to the carrier element only after one or more layers of the card composite have been softened. This can take place, for example, by providing buffer zones in the card composite before it is laminated, or in the laminating device, which buffer zones keep the full laminating pressure away from the carrier element during the initial phase. A further possibility is to control the laminating pressure as a function of the temperature and/or the degree of softness of the identification card layers. The appearance of local pressure peaks is not possible as the operations according to the invention all involve the full laminating pressure being applied over the entire surface of the material that is already softened or is elastically deformable in a cold state and surrounds the carrier element.

In the following, the embodiments of the invention are described in more detail with reference to the attached drawings. These show:

FIG. 1—the top view of an identification card with an embedded integrated circuit,

FIGS. 2a, b—the first embodiment of the card construction before and after lamination in cross-section,

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FIGS. 3a, b—the second embodiment of the card construction before and after lamination in cross-section,

FIGS. 4a, b—the third embodiment of the card construction before and after lamination in cross-section and

FIGS. 5a, b—the fourth embodiment of the card construction before and after lamination in cross-section.

FIG. 1 shows an identification card 1 with an embedded IC module 5. The IC module itself is placed in a carrier element 6 which has a disk-shaped construction in the embodiment shown. The contact surfaces 7 are provided for contacting.

The carrier element 6 is produced independently of the card production. The construction of the carrier element, the type of materials employed, the arrangement and construction of the contacts can vary greatly depending on the technical resources and the range of application of the elements in the finished identification card.

The identification card shown in FIG. 1 meets the ISO norm in its dimensions and in the arrangement of further functional areas. Accordingly, the magnetic strip 15 is on the reverse side of the card, as also shown in FIGS. 2a, b.

The fields 9 and 10, respectively, are provided for machine-readable and non-machine-readable embossed data.

FIG. 1 shows an advantageous arrangement of the carrier element 6 outside the embossing fields 9 and 10, respectively, in an area of the card subjected to little stress.

The embodiments described in the following show by way of example by what means local pressure peaks can be kept away from the carrier element, although the whole card composite, including the area in which the carrier element is arranged, receives the full laminating pressure at least in the final phase of the laminating process.

It is thus possible to produce identification cards with an integrated circuit with the quality of usual hot-laminated cards without endangering the circuit and its connection leads.

FIGS. 2a and 2b show the first embodiment of the invention before and after the laminating process. The proportions of the various elements of the card are not always shown in correct scale in this and the following embodiments, for the sake of clarity.

The simple card composite shown in cross-section consists of a—possibly many-layered and printed—card core or card bed 11 and the cover films 12 and 13. The card core and the cover films can consist of PVC (polyvinyl chloride). Paper can also be used as a card bed. The card bed is provided with a closely fitted recess to accept the carrier element 6. The thickness of the card bed is chosen relative to the thickness of the carrier element 6 in such a way that a cavity 14 results in the unlaminated card composite between the surface of the carrier element and the cover film 12.

The carrier element is only subjected to little stress in the initial phase of the laminating process due to the buffer zone formed by the cavity 14. In the further course of the laminating process the card composite is gradually heated up so that the PVC-layers soften. In the softening phase of the layers the cavity 14 disappears and the full laminating pressure now also takes effect in the area of the carrier element 6. In this phase

the softened layers form a cushion which keeps local pressure peaks away from the carrier element.

As shown in the laminated card composite (FIG. 2b), the carrier element 6 is connected with the identification card 1 on all sides and over its entire surface, i.e. it is laminated in. In the process a magnetic strip 15, if required, is embedded in the film material in such a way that a smooth surface also results in the area of the magnetic strip.

The contacts or coupling elements 7 are covered in the embodiment by the film 12. This embodiment is thus suitable for indirect (contactless) contacting (e.g. capacitive or optical). If the energy transfer is to take place optically, the cover film 12 should be constructed so as to be transparent in the area of the coupling elements 7 according to the type of light employed. When IR (infrared) light is employed, the cover film can be blackened in the area of the carrier elements, so that stray light is simultaneously kept away from the IC arrangement.

In principle direct contacting can also be carried out, if, for example, the cover layer 12 is pierced for contacting with appropriate contact elements.

FIGS. 3a and 3b show the second embodiment of the invention, in which one or more buffer zones are formed by intermediate layers in the card composite, for example by a so-called laminating adhesive. For this purpose the cover films 12 and 13 are coated with the laminating adhesive 17 before the laminating process (FIG. 3a).

Adhesive suitable for this purpose (e.g. polyurethane hotmelt adhesive) should be elastic at normal temperature and have a softening temperature below that of the cover layers chosen for the card composite.

In the above-mentioned embodiment the recess of the card core 11 is punched with a diameter larger than that of the carrier element 6. Thus a free gap 18 arises around the carrier element 6, in addition to the cavity 14 shown in FIG. 2a. The recess need not in this case be fitted to the carrier element within such narrow limits as in the arrangement shown in FIG. 2a.

The carrier element is hardly subjected to any stress in the initial phase of the laminating process in the card construction shown in FIG. 3a either. As soon as the laminating temperature reaches the softening temperature of the adhesive 17 and finally surpasses it, the laminating adhesive 17 flows into the cavities 14 and 18 and thus forms a homogeneous casing for the carrier element 6.

The carrier element thus protected from local pressure peaks can now accept the full laminating pressure over its area and transfer it to the surroundings. In the meantime the cover films have also reached the softening temperature so that finally an intimate composite of all layers with each other and with the carrier element which is closed in on all sides, results.

In the complete laminated identification card (FIG. 3b) the carrier element 6 is surrounded by the adhesive 17 which is elastic in a cold state and keeps the mechanical stress arising in the daily use of the card away from the carrier element to a considerable degree.

Polyurethane can be processed not only as a fusion adhesive, but also in the form of a fusion adhesive film in the card composite. If a very soft polyurethane fusion adhesive film (e.g. platilon U02-TM Plate Bonn GmbH) is used in the card composite, it is possible to choose the thickness of the various card layers relatively to the thickness of the carrier element within such limits so as



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to make the cavity 14 very small or completely disappear, if need be. A very soft fusion adhesive film is able to accept local pressure peaks to a certain degree, even when the card composite is in a cold state. When the film softens the laminating process then proceeds as described above.

FIGS. 4a and 4b show the third embodiment of a card construction according to the invention, in which the buffer zones are formed by using, among other things, compound films.

The arrangement shown in FIG. 4a shows the construction of the card layers before lamination.

The many-layered card core consists of a paper layer 23 and the films 22 and 24 arranged on both sides of this layer. These films consist of the thermoplastic material polyethylene (PE). PE can be varied within broad ranges as far as its mechanical and thermal qualities are concerned depending on its density. PE with low density is, unlike PVC, relatively soft while having great plastic deformability and a low softening point.

In the extended card core a recess is punched depending on the diameter of the carrier element 27, which recess leaves a gap free all around the carrier element. The thickness of the various layers of the card core is chosen relative to the thickness of the carrier element 27 in such a way that a cavity 29 also remains between the carrier element and the cover layers 21 and 22 next to it. The cover layers 20, 21 and 25, 26 consist of polyethylene-coated polyvinyl chloride films which are processed as compound films. The upper cover layer 20, 21 is provided with appropriate recesses 31 to conduct the contacts 30 of the carrier element 27.

In a cold state the carrier element 27 is hardly affected by the pressure of the laminating plate due to the selected layer construction. In the course of the laminating process the PE layers are first subjected to the flow phase so that the cavities 28, 29 are filled up with the PE material. The casing protects the carrier element from local pressure peaks during the high pressure necessary in the final phase of lamination and also provides good protection against mechanical deformation in the daily use of the card.

In the embodiment of an IC identification card shown in FIG. 4b, the contacts of the carrier element 27 are directed to the surface of the cover layer, so that in this case direct contacting is possible.

FIGS. 5a and 5b show a fourth embodiment of the invention, in which only so-called compound films are used to form the buffer zones.

The compound films used in this example as cover layers are polyester films (PETP) 32 and 40, respectively, which are coated with polyethylene (PE) 33 and 39, respectively. The symmetrically adjacent second compound films consist of PE 34, 38 and PVC 35, 37. The card core itself 36 can consist optionally of PVC or paper due to this special card construction.

FIG. 5b shows the identification card after the laminating process, which can proceed as explained in connection with FIGS. 4a, 4b. As mentioned, the cover films of this identification card consist of a special polyester.

PETP (polyethylene glycol terephthalate) is a thermoplastic polyester with very great rigidity, great abrasive resistance, little tendency to contract and a high softening point. These films are thus especially well suited for identification cards that are exposed to great stress in daily use.

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As the polyester films employed have only little tendency to contract, unlike, for example, PVC films, it is possible to heat the card composite at first without using pressure, until the PE layers go into the flow phase. The card compound softened in this way is then pressed together under pressure. The card layers that have been softened in a heating unit can thus subsequently be pressed together e.g. with the help of two rollers, by the so-called roller lamination technique.

In the above embodiments buffer zones are provided in the layer construction of the card composite to protect the carrier element.

It is, however, also possible to provide the carrier element itself with a buffer zone over its entire surface or only partially—before lamination. Usable materials, their properties and their behavior during the laminating process have been mentioned in connection with the description of FIGS. 3a and 3b. The carrier element could be dipped in an appropriate resin for a casing of its entire surface.

If the carrier element itself consists of rigid material, a partial coating of the element can, for example, be provided by covering the contact side with a fusion adhesive film as a buffer zone.

A further possibility of protecting the carrier element from local pressure peaks during lamination consists in coating the laminating plates with a soft, flexible material at least in the area of the carrier element. Silicon rubber is, for example, appropriate for this purpose.

Finally it is also possible to protect the carrier element against local mechanical stress during incorporation into identification cards, if the laminating pressure is adjusted as a function of the temperature. In this case the contracting tendency of the film type employed must be taken into consideration, as it rises with the temperature.

The laminating pressure will thus be increased as a function of the temperature in such a way that the films involved do not warp, but on the other hand the carrier element is subjected to the full laminating pressure in the final phase of the laminating process, after the card layers have softened. By use of the method of controlling the laminating pressure as a function of the temperature, integrated circuits can be embedded in identification cards undangerously, without any need of additional measures.

On the other hand, it may prove useful for certain cases of application, e.g. the processing of films with a great contracting tendency, to combine the method of controlling the laminating pressure with one or more of the above-mentioned protective measures.

What is claimed is:

1. A method for producing a multi-layer identification card having an IC-module for processing electrical signals, the IC-module with its connection leads being arranged on a separate carrier element that is small relative to the identification card, said method avoiding localized pressures on the carrier element during production of the card and comprising the steps of:

providing an identification card assembly including an internal layer having a recess for the carrier element and at least one covering layer heat sealable to the internal layer, at least one of said layers being thermally softenable;

inserting the carrier element in the recess;

before or after inserting the carrier element in the recess, establishing a buffer proximate to the carrier element for limiting the application of force to

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the carrier element prior to thermal softening of the card layer; and

applying heat and pressure to the identification card assembly to heat seal the layers together, said buffer limiting the application of force to the carrier element prior to softening of the thermally softenable layer to avoid localized pressure on the carrier element.

2. The method as in claim 1 wherein the step of establishing the buffer is further defined as forming the recess in the internal layer of the identification card assembly to provide spacing between at least one of the layers and the carrier element prior to the softening of the thermally softenable layer.

3. A method as in claim 2 wherein the step of establishing the buffer is further defined as providing an additional card layer intermediate the internal layer and covering layer having a lower thermal softening point than that of the covering layer or internal layer.

4. A method as in claim 2 wherein the step of establishing the buffer is further defined as at least partially encasing the carrier element in a material having a thermal softening point lower than that of the covering layer.

5. A method as in claim 1 wherein the step of establishing the buffer is further defined as providing an

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elastic means intermediate the carrier element and at least one of the layers to which pressure is applied.

6. A method as in claim 5 wherein the step of establishing the buffer is further defined as at least partially encasing the carrier element in an elastic material.

7. A method as in claim 5 wherein the step of establishing the buffer is further defined as forming the buffer by incorporating an elastic layer in the identification card assembly.

8. A method as in claim 5 further defined as providing an elastic means intermediate the carrier element and layer that has a higher degree of elasticity in the unheated state than the layers of the card assembly.

9. A method as in claim 1 further defined as controlling the pressure applied to the assembly as a function of the temperature of the assembly.

10. A method as in claim 1 further defined as controlling the pressure applied to the assembly as a function of the amount of softening of the thermally softenable layer.

11. A method as in claim 2 further defined as applying the heat to the identification card assembly and thereafter applying pressure to the assembly.

12. A method as in claim 7 wherein the step of establishing the buffer is further defined as forming the buffer as an elastic coating on one of the layers of the card.

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**EXHIBIT 32**

529bleih

1 UNITED STATES DISTRICT COURT  
2 SOUTHERN DISTRICT OF NEW YORK

3 LEIGHTON TECHNOLOGIES, LLC,

4 Plaintiff-Counterclaim Defendant,

5 v.

04 Civ. 2496(CM)

6 MARKMAN HEARING

7 OBERTHUR CARD SYSTEMS, S.A.,

8 Defendant-Counterclaim Plaintiff.

9  
10 -----x  
11 White Plains, N.Y.  
12 February 9, 2005  
13 10:00 a.m.

14 Before:

15 THE HONORABLE COLLEEN McMAHON,

16 District Judge

17 APPEARANCES

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Attorneys for Defendant-Counterclaim Plaintiff

23 JAMES DAVID JACOBS

24 FRANK M. GASPARO

25 Also present: MIREILLE CLAPIER, Oberthur inhouse counsel

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1 protects, it holds, it serves a protective purpose, and it has  
2 structure. That's what's clear from the dictionary  
3 definitions. That's what's clear from the prior art. And  
4 that's what's clear from the specification when we look through  
5 and we confirm everything. Those points are the key points  
6 that it has structure, that it protects, and that it holds.

7 Most of those points aren't disputed, if you look at  
8 the proposed construction.

9 THE COURT: There is nothing there that does any of  
10 those things. That's the point of your patent, that there's  
11 nothing that does any of those things.

12 MR. B. JACOBS: That's exactly right. We eliminated  
13 that and, in eliminating that, came up with something novel and  
14 something new. That is the main reason why the first patent,  
15 the '207 patent, issued. The '024, that's correct.

16 So what we did was we amended the claims in the  
17 absence of a nonelectronic carrier. We took out that  
18 protective holder, that disk-shaped holder that was essentially  
19 shown in the prior art, and we explained that that's one of the  
20 benefits, one of the many benefits of this process, that we're  
21 able to --

22 THE COURT: You put down plastic sheet number one.  
23 You put down the electronic element on top of that. You put  
24 plastic sheet number two on top of that.

25 MR. B. JACOBS: And then do the lamination through the



**EXHIBIT 33 IS BEING FILED UNDER SEAL PURSUANT TO  
THE PROTECTIVE ORDER ENTERED IN THIS CASE ON AUGUST 20, 2004  
BECAUSE IT CONTAINS CONFIDENTIAL INFORMATION**